

Appl. No.: 09/470,890
Docket No.: BCS03393

REMARKS

This amendment is in response to the Final Office action mailed on March 1, 2005. Claims 1-5, 7-33, 35, 36, 38 and 39 are currently pending and claims 6, 34, 37 and 40-46 have been canceled. No new matter has been added. Applicant respectfully requests reconsideration of the pending claims in view of the above amendments and arguments below.

Applicant would like to thank the Examiner for his time during the telephone interview on Friday, April 29. During the interview, the Jokinen reference was discussed with respect to various claim limitations. Applicant believes this response addresses the Examiner's concerns raised during that interview.

Independent claims 1, 7, 12, 19, 24 and 29 have been amended to include a definition for "impairment mask." As outlined in the Final Rejection mailed March 1, 2005, the Examiner stated that the claims did not provide an interpretation of this term. These claims are distinguishable from Jokinen for at least two reasons.

First, Jokinen does not use a plurality of impairment masks at all. However, even if Jokinen did, as argued by the Examiner, whatever "impairment mask" Jokinen would use as described is not predefined. Jokinen eliminates interference from other mobile phone users. This interference is dependent upon the number of mobile phone users in a cell or region at a given time. As an example, if there are 5 individuals using their mobile phones in a cell or region, each individual user will need 4 interference reducing calculations in Jokinen's system. The number of times the apparatus of Jokinen performs the described calculation changes as users enter and leave the cell or region. It therefore

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cannot be known beforehand how many interfering signals Jokinen must process nor what type of interference calculation will need to be performed.^{1 2}

Second, an impairment mask is a set of undesired values for a digitally modulated signal, digital signal, downstream signal or upstream signal. Jokinen cannot determine what is a desired value or an undesired value associated with a signal. All Jokinen can do is reduce interference caused by other mobile phone users in a system (see, page 2, lines 14-17). Jokinen presumes that the one mobile phone signal received is correct (the one signal that carries the voice data wanted by the mobile telephone user) and that every other mobile phone signal is interference that needs to be reduced (see, page 2, lines 26-28). This is not an analysis between desired and undesired values.

Independent claims 35 and 38 describe performing a ratio analysis. Jokinen's calculation (see page 4, line 17) is an integration of signals. It does not take a ratio with respect to a predefined reference point. As outlined above, Jokinen does not have a predefined reference point as it cannot know how many users it will have nor the pseudo-random codes each will use before a link is established between a mobile user and a base station.

The Examiner rejected dependent claims 4, 32, 36 and 38 using a combination of Jokinen and Hewitt. This combination is improper. The Examiner cites to column 4, lines 24-37 as a teaching in Hewitt that a three-dimensional presentation is performed. No such teaching is found in this citation nor anywhere else in Hewitt. This combination

¹ Again, this argument assumes the Examiner's presumption that each unwanted users' signal is reduced via a separate and different "impairment mask" calculation. Applicant does not agree with this interpretation.

² With respect to claim 7, and its depend claims, both a symbol-level and a constellation-level impairment are recited. Even assuming multiple users' signals are eliminated via an "impairment mask", one interfering user cannot create a symbol-level impairment while another user creates a constellation-level impairment since both are transmitting similar types of signals.

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does not arrive at the claimed invention nor is there proper motivation given to combine these references.

The Examiner also rejected claims 17, 18, 21 and 26 using Jokinen alone. All of these claims describe communicating control information between two devices that is dependent upon a method using impairment masks. Jokinen's invention is contained in a single device and generally a mobile telephone. This is because Jokinen's invention is directed towards reducing interference caused by signals from other mobile telephone users. Nowhere does Jokinen describe sending a signal to a base station or other device telling it what to do as a result of the calculations described therein.

Applicant respectfully submits the present application is in condition for allowance and a Notice thereto is requested. If the Examiner has any questions regarding this application, he is invited to contact the undersigned representative below.

Respectfully submitted,

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5/2/05
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